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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)			
	10/824,064	DETTINGER ET AL.			
Office Action Summary	Examiner	Art Unit			
	Nathan Hillery	2176			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the o	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tir vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. (D (35 U.S.C. § 133).			
Status					
1)⊠ Responsive to communication(s) filed on 18 December 2a)⊠ This action is FINAL. 2b)□ This     3)□ Since this application is in condition for alloware closed in accordance with the practice under E	action is non-final.  nce except for formal matters, pro				
Disposition of Claims					
4) ⊠ Claim(s) 1-59 is/are pending in the application.  4a) Of the above claim(s) is/are withdraw  5) □ Claim(s) is/are allowed.  6) ⊠ Claim(s) 1-59 is/are rejected.  7) □ Claim(s) is/are objected to.  8) □ Claim(s) are subject to restriction and/or	vn from consideration.				
Application Papers					
9) The specification is objected to by the Examiner 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction of the oath or declaration is objected to by the Examiner	epted or b) objected to by the drawing(s) be held in abeyance. Section is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Do 5) Notice of Informal F 6) Other:	ate			

Application/Control Number: 10/824,064

Art Unit: 2176

#### **DETAILED ACTION**

Page 2

1. This action is responsive to the following: Amendment filed on 12/18/06.

2. Claims 1-59 have been examined, with claims 1, 14, 31, 37, and 47 being the independent claims.

### The Specification

3. Applicant is required to update the status (pending, allowed, etc.) of all parent priority applications in the first line of the specification. The status of all citations of U.S. filed applications in the specification should also be updated where appropriate.

### Claims Rejection – 35 U.S.C. 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brook (U.S. Patent Application Publication, published March 28, 2002) [hereinafter "Brook"].

Regarding independent claim 1, Brook teaches:

A method of testing content, comprising:

parsing, by a parser, two or more documents in tandem on an element-byelement basis, whereby the elements of each of the documents are sequentially parsed;

upon parsing each of the respective sequential elements in a first document of the two or more documents and each of the other documents, comparing the respective parsed elements to one another; and

on the basis of the comparison, determining whether the documents are at least equivalent.

(Brook teaches parsing two or more documents by elements and creating hash tables of the parsed elements for efficient comparisons. The hash tables are taught as a further step in parsing by elements for comparisons, and is taught as being preferable to a direct comparison by elements, however, the direct comparison is also taught as the inefficient method. See, Brook, paragraphs [0002] and [0206]-0225].

Brook teaches parsing and comparison for purposes of comparison and validation, which is determining whether the documents are at least equivalent. See, Brook, paragraph [0236].

Brook does not expressly teach parsing two more documents "in tandem on an element-by-element basis, whereby the elements of each of the documents are sequentially parsed." Brook does teach parsing two documents element by element and comparing the documents for validation. See, Brook, paragraphs [0060]-[0069]. Brook also teaches use of the invention as an "event-based parser," which parses a document element by element, rather than in its entirety first. It would have been

obvious to one or ordinary skill in the art at the time of the invention to read Brook as teaching that one could parse two or more documents for validation in an event-type process whereby the two documents could be understood as being sequentially parsed, or "in tandem.")

### Regarding dependent claim 2, Brook teaches:

The method of claim 1, wherein each of the other documents is a current response from an application responding to a submitted request and the first document is a control document retrieved from storage and previously returned from the application in response to the request.

(Claim 2 incorporates substantially similar subject matter as claimed in claim 1 and, in further view of the following is rejected along the same rationale.

Brook teaches a control document retrieved from storage as a "validation reference document (VRD)." See, Brook, paragraphs [0014]-[0023].

The characterizations of the first document being a "response from an application responding to a submitted request" and the control document being "previously returned from the application in response to the request" are read as non-function descriptive language. The claimed invention of comparing documents element by element does not change depending on the identification of the documents.)

#### Regarding dependent claim 3, Brook teaches:

The method of claim 1, wherein the parser is a SAX parser.

(See, Brook, figures 2(a), 2(b), 3(a), 3(b), and 3(c), and paragraphs [0005], [0209], and [0226], teaching use of a SAX parser.)

### Regarding dependent claim 4, Brook teaches:

The method of claim 1, further comprising, upon determining that the documents are not equivalent, issuing a user warning.

(Brook teaches the invention of claim 1, but does not expressly teach that if the documents are not equivalent, issuing a user warning.

Brook teaches comparing the documents on an element by element bases for purposes of validating and error checking. See, Brook, paragraphs [0234]-[0238]. It would have been obvious to one of ordinary skill in the art at the time of the invention to have included as warning to the user if the validation or error checking found that the documents were not equivalent, or, in other words, if the comparison found a validation or an error in the documents, for the obvious and beneficial purpose of notifying the user so that the error may be corrected.)

#### Regarding **dependent claim 5**, Brook teaches:

The method of claim 1, further comprising, disregarding, for purposes of the comparing, elements of at least one of the documents identified by predefined attributes identifiable by the parser.

(It is noted that other than the appearance of the limitation in two claims, the term "disregarding" is not found to be discussed in the specification. The Examiner believes

that the Applicants intended the limitation of "disregarding, for purposes of comparing, elements of at least one of the documents" to specify that not all elements of the two documents had to match in order to be found to be "equivalent," and the limitation will be so read for the remainder of this Office Action.

See, Brook, paragraphs [0179]-[0183], teaching to disregard all but the most deeply nested syntactic element of the document for comparison.)

## Regarding dependent claim 6, Brook teaches:

The method of claim 1, wherein determining whether the documents are at least equivalent comprises determining whether the documents are structurally equivalent and wherein comparing the parsed documents comprises:

comparing sequentially occurring non-character elements in the respective documents; and

disregarding character elements; and

wherein determining whether the documents are equivalent comprises determining whether the non-character elements are the same.

(See, Brook, paragraph [0004], teaching to parse documents for hierarchical tags, which disregards character elements and defines the structure of the documents, and to compare the hierarchical structures for validation.)

#### Regarding dependent claim 7, Brook teaches:

The method of claim 1, wherein determining whether the documents are at least equivalent comprises determining whether the documents are at least one of structurally equivalent and content equivalent.

(See, Brook, paragraphs [0234]-[0238], teaching comparing the documents on an element by element bases for purposes of validating and error checking, which is checking for at least structural equivalence.)

## Regarding dependent claim 8, Brook teaches:

The method of claim 7, wherein the documents are foreign-language counterparts of one another; and

wherein comparing the parsed documents comprises comparing
sequentially occurring elements in the respective documents; and
wherein determining whether the documents are structurally equivalent
comprises determining whether the non-character elements are the same; and

further comprising determining whether the documents are content equivalent by determining whether the character elements are different.

(Claim 8 incorporates substantially similar subject matter as claimed in claim 7 and, in further view of the following is rejected along the same rationale. See, Brook, paragraphs [0234]-[0238], teaching comparing the documents on an element by element bases for purposes of validating and error checking, which is checking for structural and content equivalencies.

The limitation that "the documents are foreign-language counterparts of one another" is read as non-functional descriptive language. The function of the invention of comparing markup language tags and element characters is not changed by the identification of the language. The language of the document has no effect on the function of the invention.)

Page 8

## Regarding dependent claim 9, Brook teaches:

The method of claim 8, upon determining that the documents are content equivalent, issuing a warning of a possible mistranslation of content in at least one of the documents.

(Brook teaches the invention of claim 8, but does not expressly teach issuing a warning of a possible mistranslation of content in at least one of the documents.

Brook teaches comparing the documents on an element by element bases for purposes of validating and error checking. See, Brook, paragraphs [0234]-[0238]. It would have been obvious to one of ordinary skill in the art at the time of the invention to have included as warning to the user if the validation or error checking found that the documents were not equivalent, or, in other words, if the comparison found a validation or an error in the documents, for the obvious and beneficial purpose of notifying the user so that the error may be corrected.)

Regarding dependent claim 10, Brook teaches:

The method of claim 1, wherein the documents are XML documents containing XHTML.

(See, Brook, figure 4, and paragraphs [0250]-[0254] and [0263], teaching the invention applied to "markup language documents." XHTML is a markup language document and it is implicit in the teachings that the invention could be applied to XHTML.)

## Regarding dependent claim 11, Brook teaches:

The method of claim 1, wherein the documents are well-formed

documents having well-defined content structures identifiable by a parser parsing
the documents.

(See, Brook, paragraph [0263], teaching that the invention may be applied to well-formed documents having well-defined content structures identifiable by a parser parsing the documents, such as is inherent in markup language documents.)

#### Regarding **dependent claim 12**, Brook teaches:

The method of claim 1, further comprising:

applying one or more test expressions to at least one of the documents;

and

determining whether the one or more test expressions are satisfied. (See, Brook, paragraph [0260], teaching an "imperfect hash process" wherein the comparison of the document elements is done with less than all of the input. The limited input becomes the "test expressions" specified in the claim.)

# Regarding dependent claim 13, Brook teaches:

The method of claim 12, wherein the one or more test expressions are XPATH queries.

(It is noted that XPATH, of XPath, was known to one of ordinary skill in the art at the time of the invention as an XML language of addressing items in an XML document by specifying a path through the document structure. XPath was used by XPointer and XSLT to locate and identify XML document data. See, "Microsoft Computer Dictionary," Fifth Edition, Microsoft Press, 2002, definition of "XPath."

It is further noted that there is no express disclosure in the specification on how to use an XPATH query as a test expression in the invention of claim 1. Upon examination of the specification and claims, the Examiner believes that the inventors intended the claim to specify a method of comparing only certain limited data within a markup language element, and the claim will be so read for the remainder of this office action.

Brook does not expressly teach the use of XPath to identify data in an element, but it does teach the "imperfect hash process" wherein limited data is identified and compared. It would have been obvious to one of ordinary skill in the art at the time of the invention to have used an XPath query to identify data within elements for comparison in a limited comparison, such as in the "imperfect hash process" taught by Brook, for the obvious and beneficial purpose of specifically identifying data to be compared. The suggestion or motivation for so modifying the teachings of Brook is that

brook teaches comparisons of partial data, and XPath was written for the purpose of identifying limited data. One of ordinary skill in the art at the time of the invention would be motivated to use XPath for its standard lower level purpose in conjunction with Brook, which teaches the higher level method.)

### Regarding independent claim 14, Brook teaches:

A method of testing and validating user interface content, comprising: submitting a request to an application;

in response to the request, receiving a response document from the application;

retrieving from storage a control document previously returned from the application in response to the request;

sequentially determining each element of the response document and the control document;

for at least some of the respective sequentially determined elements from the respective documents, comparing the elements to one another; and

on the basis of the comparison, determining whether the elements are equivalent.

(Brook teaches parsing two or more documents by elements and creating hash tables of the parsed elements for efficient comparisons. The hash tables are taught as a further step in parsing by elements for comparisons, and is taught as being preferable to a Application/Control Number: 10/824,064

Art Unit: 2176

direct comparison by elements, however, the direct comparison is also taught as the inefficient method. See, Brook, paragraphs [0002] and [0206]-0225].

Brook teaches parsing and comparison for purposes of comparison and validation, which is determining whether the documents are at least equivalent. See, Brook, paragraph [0236].

Brook also teaches parsing two documents element by element and comparing the documents for validation. See, Brook, paragraphs [0060]-[0069].

See, Brook, paragraphs [0014]-[0274], teaching comparison of a parsed document against a control document, which is taught as a Validation Reference Document (VRD).0

#### Regarding dependent claim 15, Brook teaches:

The method of claim 14, wherein the documents contain XHTML and the elements are nodes of XHTML content of the respective documents.

(See, Brook, figure 4, and paragraphs [0250]-[0254] and [0263], teaching the invention applied to "markup language documents." XHTML is a markup language document and it is implicit in the teachings that the invention could be applied to XHTML. Elements of and XHTML document are nodes.)

The method of claim 14, wherein at least two response documents are

## Regarding dependent claim 16, Brook teaches:

returned in response to the request and wherein the steps of sequentially determining each element, comparing the elements and determining whether the elements are equivalent is performed are performed for all of the documents.

(Claim 16 incorporates substantially similar subject matter as claimed in claim 14 and, in further view of the following is rejected along the same rationale. Brook teaches the limitations of Claim 14, which teaches the limitations of claim 16, except doing the comparison on more than one document. It would have been obvious to one of ordinary skill in the art at the time of the invention that if one document may be compared, that more documents could be compared, for the obvious and beneficial purpose of comparing all relevant documents.)

#### Regarding dependent claim 17, Brook teaches:

The method of claim 14, wherein comparing the elements to each other comprises:

comparing sequentially occurring non-character elements in the respective documents; and

disregarding character elements.

(Claim 17 incorporates substantially similar subject matter as claimed in claim 6 and is rejected along the same rationale.)

Regarding dependent claim 18, Brook teaches:

The method of claim 14, further comprising, for at least some of the respective sequentially determined elements from respective documents, disregarding the elements.

(Claim 18 incorporates substantially similar subject matter as claimed in claim 6 and is rejected along the same rationale.)

Regarding dependent claim 19, Brook teaches:

The method of claim 14, wherein sequentially determining the elements of the documents comprises parsing the respective documents and wherein the documents are well-formed documents having well-defined elements identifiable by a parser parsing the documents.

(Claim 19 incorporates substantially similar subject matter as claimed in claim 11 and is rejected along the same rationale.)

Regarding dependent claim 20, Brook teaches:

The method of claim 19, wherein the parser is a SAX parser.

(Claim 20 incorporates substantially similar subject matter as claimed in claim 3 and is rejected along the same rationale.)

Regarding dependent claim 21, Brook teaches:

The method of claim 14, wherein the documents are foreign-language counterparts of one another and further comprising:

upon determining that the documents are equivalent, issuing a warning of a possible mistranslation in at least one of the documents.

(Claim 21 incorporates substantially similar subject matter as claimed in claim 8 and is rejected along the same rationale.)

## Regarding dependent claim 22, Brook teaches:

The method of claim 14, wherein a first document is a control document previously returned from an application in response to a user action, and then captured, stored and subsequently retrieved from storage to determine a first structural element for comparison.

(Claim 22 incorporates substantially similar subject matter as claimed in claim 2 and is rejected along the same rationale.)

## Regarding **dependent claim 23**, Brook teaches:

The method of claim 22, wherein a second document is a live document currently returned from the application in response to the user action during a session in which the application is being accessed.

(See, Brook, paragraph [0007], teaching use of the invention in limited memory hardware, wherein the document would be live.)

## Regarding dependent claim 24, Brook teaches:

The method of claim 14, wherein the documents are XML documents containing XHTML.

(Claim 24 incorporates substantially similar subject matter as claimed in claim 10 and is rejected along the same rationale.)

## Regarding dependent claim 25, Brook teaches:

The method of claim 14, further comprising:

applying a test expression to the documents, the test expression being configured to select specific portions of the documents; and

comparing the specific portions for equivalence.

(Claim 25 incorporates substantially similar subject matter as claimed in claim 12 and is rejected along the same rationale.)

## Regarding dependent claim 26, Brook teaches:

The method of claim 25, wherein sequentially determining the elements comprises parsing the respective documents.

(Claim 26 incorporates substantially similar subject matter as claimed in claim 12 and is rejected along the same rationale.)

## Regarding dependent claim 27, Brook teaches:

The method of claim 14, further comprising:

applying one or more test expressions to at least one of the documents;

and

determining whether the one or more test expressions are satisfied.

(Claim 27 incorporates substantially similar subject matter as claimed in claim 12 and is rejected along the same rationale.)

## Regarding dependent claim 28, Brook teaches:

The method of claim 27, wherein the one or more test expressions are XPATH queries.

(Claim 28 incorporates substantially similar subject matter as claimed in claim 13 and is rejected along the same rationale.)

#### Regarding dependent claim 29, Brook teaches:

The method of claim 27, wherein at least one test expression is configured to determine a presence of a specific value of a structural element of the second document.

(Claim 29 incorporates substantially similar subject matter as claimed in claim 13 and, in light of the following, is rejected along the same rationale. The purpose of an XPath query is to locate a specific value in the document.)

# Regarding dependent claim 30, Brook teaches:

and

The method of claim 27, wherein sequentially determining the elements comprises parsing the respective documents:

(Claim 30 incorporates substantially similar subject matter as claimed in claim 13 and, in light of the following, is rejected along the same rationale. The parsing is specified in claim 14.)

## Regarding independent claim 31, Brook teaches:

A method for testing and validating content in a user interface, comprising:

a) performing a first testing and validation technique, comprising: parsing a first document with a first parser;

parsing a second document with the first parser;

comparing the parsed first document to the parsed second document;

on the basis of the comparison, determining whether the documents are equivalent; and

b) performing a second testing and validation technique, comprising:

parsing the second document with a second parser;

applying one or more test expressions to the parsed second document;

determining whether the one or more test expressions are satisfied.

((Brook teaches parsing two or more documents by elements and creating hash tables of the parsed elements for efficient comparisons. The hash tables are taught as a further step in parsing by elements for comparisons, and is taught as being preferable to

a direct comparison by elements, however, the direct comparison is also taught as the inefficient method. See, Brook, paragraphs [0002] and [0206]-0225].

Brook teaches parsing and comparison for purposes of comparison and validation, which is determining whether the documents are at least equivalent. See, Brook, paragraph [0236].

Brook does not expressly teach parsing two more documents "in tandem on an element-by-element basis, whereby the elements of each of the documents are sequentially parsed." See, Brook, paragraphs [0060]-[0069], teaching parsing two documents element by element and comparing the documents for validation. Brook also teaches use of the invention as an "event-based parser," which parses a document element by element, rather than in its entirety first.

See specifically, Brook, paragraphs, [0227]-[0259], teaching a first test for validation and a second test for error checking.)

#### Regarding dependent claim 32, Brook teaches:

The method of claim 31, wherein determining whether the documents are equivalent comprises determining whether the documents are structurally equivalent.

(Claim 32 incorporates substantially similar subject matter as claimed in claim 7 and is rejected along the same rationale.)

Regarding dependent claim 33, Brook teaches:

The method of claim 31, wherein determining whether the documents are equivalent comprises determining whether selected portions of the documents are equivalent in content.

(Claim 33 incorporates substantially similar subject matter as claimed in claim 12 and is rejected along the same rationale.)

## Regarding dependent claim 34, Brook teaches:

The method of claim 31, wherein the first parser is at SAX parser.

(Claim 34 incorporates substantially similar subject matter as claimed in claim 3 and is rejected along the same rationale.)

#### Regarding dependent claim 35, Brook teaches:

The method of claim 31, wherein the first parser is at SAX parser and the second parser is a DOM parser.

(Claim 34 incorporates substantially similar subject matter as claimed in claim 3 and, further in view of the following, is rejected along the same rationale. It is noted that SAX and DOM parsers were known to one of ordinary skill in the art at the time of the invention as a SAX parser being an events driven parser, while a DOM parser was a tree based parser. Brook teaches the use of both tree and event driven parsers, and expressly teaches the use of a SAX parser and implicitly teaches the use of a DOM parser. See, Brook, paragraphs [0002]-[0008] and [0209]-[0225].)

The method of claim 31, wherein the first parser is at SAX parser, the second parser is a DOM parser and the one or more test expressions are XPATH queries.

(Claim 36 incorporates substantially similar subject matter as claimed in claims 3 and 13 and is rejected along the same rationale.)

Regarding independent claim 37, Brook teaches:

A computer readable medium containing a program which, when executed, performs an operation for testing content, comprising:

parsing a first document being well-formed and having identifiable structures;

parsing a second document being well-formed and having identifiable structures;

comparing the parsed first document to the parsed second document; and on the basis of the comparison, determining whether the documents are at least structurally equivalent.

(Claim 37 incorporates substantially similar subject matter as claimed in claim 1 and is rejected along the same rationale.)

Regarding dependent claim 38, Brook teaches:

The computer readable medium of claim 37, wherein the parsing is done by a SAX parser.

(Claim 38 incorporates substantially similar subject matter as claimed in claim 3 and is rejected along the same rationale.)

## Regarding dependent claim 39, Brook teaches:

The computer readable medium of claim 37, further comprising, upon determining that the documents are not structurally equivalent, issuing a user warning.

(Claim 39 incorporates substantially similar subject matter as claimed in claim 4 and is rejected along the same rationale.)

#### Regarding dependent claim 40, Brook teaches:

The computer readable medium of claim 37, further comprising determining whether the documents are content equivalent.

(Claim 40 incorporates substantially similar subject matter as claimed in claim 7 and is rejected along the same rationale.)

## Regarding dependent claim 41, Brook teaches:

The computer readable medium of claim 37, wherein comparing the parsed documents comprises:

comparing sequentially occurring non-character elements in the respective documents; and

disregarding character elements; and

wherein determining whether the documents are structurally equivalent comprises determining whether the non-character elements are the same.

(Claim 41 incorporates substantially similar subject matter as claimed in claim 6 and is rejected along the same rationale.)

## Regarding dependent claim 42, Brook teaches:

The computer readable medium of claim 37, wherein the documents are foreign-language counterparts of one another and wherein comparing the parsed documents comprises:

comparing sequentially occurring elements in the respective documents;

wherein determining whether the documents are structurally equivalent comprises determining whether the non-character elements are the same; and further comprising determining whether the documents are content

equivalent by determining whether the character elements are different.

(Claim 42 incorporates substantially similar subject matter as claimed in claim 8 and is rejected along the same rationale.)

Regarding dependent claim 43, Brook teaches:

The computer readable medium of claim 42, upon determining that the documents are content equivalent, issuing a warning of a possible mistranslation of content in at least one of the documents.

(Claim 43 incorporates substantially similar subject matter as claimed in claim 9 and is rejected along the same rationale.)

## Regarding dependent claim 44, Brook teaches:

The computer readable medium of claim 37, wherein the documents are XML documents containing XHTML.

(Claim 44 incorporates substantially similar subject matter as claimed in claim 10 and is rejected along the same rationale.)

## Regarding dependent claim 45, Brook teaches:

and

The computer readable medium of claim 37, further comprising:

applying one or more test expressions to at least one of the documents;

determining whether the one or more test expressions are satisfied.

(Claim 45 incorporates substantially similar subject matter as claimed in claim 12 and is rejected along the same rationale.)

Regarding dependent claim 46, Brook teaches:

The computer readable medium of claim 45, wherein the one or more test expressions are XPATH queries.

(Claim 46 incorporates substantially similar subject matter as claimed in claim 13 and is rejected along the same rationale.)

## Regarding independent claim 47, Brook teaches:

A computer, comprising:

a user interface testing tool comprising at least a first parser and a comparator, and operable to perform at least a first testing technique in which the tool is configured to:

retrieve a first document from storage, the first document having been previously returned from an application in response to user input;

request and receive a second document from the application during a current session in which the application is being accessed by the user interface testing tool;

parse the first document using the first parser;

parse the second document using the first parser; compare, by the comparator, the parsed first document to the parsed second document; and on the basis of the comparison, determine at least whether the documents are at least structurally equivalent.

(Claim 47 incorporates substantially similar subject matter as claimed in claim 2 and is rejected along the same rationale.)

Regarding dependent claim 48, Brook teaches:

The computer of claim 47, wherein the documents are well-formed and

have identifiable structures.

(Claim 48 incorporates substantially similar subject matter as claimed in claim 11 and is

rejected along the same rationale.)

Regarding dependent claim 49, Brook teaches:

The computer of claim 47, wherein the parsing is done by a SAX parser.

(Claim 49 incorporates substantially similar subject matter as claimed in claim 3 and is

rejected along the same rationale.)

Regarding dependent claim 50, Brook teaches:

The computer of claim 47, wherein the user interface testing tool is further

configured to issue a user warning upon determining that the documents are not

structurally equivalent.

(Claim 50 incorporates substantially similar subject matter as claimed in claim 4 and is

rejected along the same rationale.)

Regarding dependent claim 51, Brook teaches:

The computer of claim 47, wherein the user interface testing tool is further

configured to determine whether the documents are content equivalent.

(Claim 51 incorporates substantially similar subject matter as claimed in claim 7 and is rejected along the same rationale.)

## Regarding dependent claim 52, Brook teaches:

The computer of claim 47, wherein the user interface testing tool compares the parsed documents by:

comparing sequentially occurring non-character elements in the respective documents; and

disregarding character elements; and

wherein the user interface testing tool determines whether the documents are structurally equivalent by determining whether the non-character elements are the same.

(Claim 52 incorporates substantially similar subject matter as claimed in claim 6 and is rejected along the same rationale.)

## Regarding dependent claim 53, Brook teaches:

The computer of claim 47, wherein the documents are foreign-language counterparts of one another and wherein the user interface testing tool compares the parsed documents by:

comparing sequentially occurring elements in the respective documents; and

wherein the user interface testing tool determines whether the documents are structurally equivalent by determining whether the non-character elements are the same; and

further determines whether the documents are content equivalent by determining whether the character elements are different.

(Claim 53 incorporates substantially similar subject matter as claimed in claim 8 and is rejected along the same rationale.)

## Regarding dependent claim 54, Brook teaches:

The computer of claim 53, wherein the user interface testing tool is further configured to issue a warning of a possible mistranslation of content in at least one of the documents upon determining that the documents are content equivalent.

(Claim 54 incorporates substantially similar subject matter as claimed in claim 9 and is rejected along the same rationale.)

## Regarding dependent claim 55, Brook teaches:

The computer of claim 47, wherein the documents are XML documents containing XHTML.

(Claim 55 incorporates substantially similar subject matter as claimed in claim 10 and is rejected along the same rationale.)

Regarding dependent claim 56, Brook teaches:

The computer of claim 47, wherein the documents are well-formed documents having well-defined content structures identifiable by the first parser.

(Claim 56 incorporates substantially similar subject matter as claimed in claim 11 and is rejected along the same rationale.)

Regarding dependent claim 57, Brook teaches:

The computer of claim 47, further comprising:

applying one or more test expressions to at least one of the documents;

and

determining whether the one or more test expressions are satisfied.

(Claim 57 incorporates substantially similar subject matter as claimed in claim 12 and is rejected along the same rationale.)

Regarding dependent claim 58, Brook teaches:

The computer of claim 57, wherein the one or more test expressions are XPATH queries.

(Claim 58 incorporates substantially similar subject matter as claimed in claim 13 and is rejected along the same rationale.)

Regarding dependent claim 59, Brook teaches:

The computer of claim 47, further comprising:

parsing the first and second documents with a second parser;

applying one or more test expressions to at least one of the documents

parsed by the second parser; and

determining whether the one or more test expressions are satisfied.

(Claim 59 incorporates substantially similar subject matter as claimed in claim 12 and is

rejected along the same rationale.)

5. It is noted that any citations to specific, pages, columns, lines, or figures in the

prior art references and any interpretation of the references should not be considered to

be limiting in any way. A reference is relevant for all it contains and may be relied upon

for all that it would have reasonably suggested to one having ordinary skill in the art.

See, MPEP 2123.

Response to Arguments

Applicant's arguments filed 12/18/06 have been fully considered but they are not

persuasive.

Applicant argues that Brook fails to teach parsing two or more documents by

elements because Brook, specifically paragraph blocks 0206 – 0225, is directed

towards parsing a single document (p 17, first full paragraph).

The Office disagrees.

Brook explicitly teaches that alternatively, the aforementioned referencing methods can be useful for <u>matching</u> purposes. This refers to applications involving <u>one</u> <u>or more markup documents</u>, where error checking or completion of parsing or other functions are required, and where one or more other documents (e.g. a DTD) have already been hashed by the same algorithm (paragraph block 0224). This specific citation is further evidence that Brook can use the disclosed methods to parse one or more markup documents for matching purposes thus meeting the claim language.

Applicant argues that Brook do not teach parsing and comparing because the citation, upon which the Office relies, is directed towards a validation check being a more detailed form of checking syntax than well-formedness checking and checks the hierarchical relationship of the tags to see if a tag should have been nested under another and towards validating the form of one particular document, not comparing two documents to see if they are equivalent (p 17, second full paragraph).

The Office disagrees.

First, it should be noted that Applicant is not fully appreciating the reference as a whole. In order to validate the form of one particular document, the particular document has to be validated against something else. In this instance, Brook teaches that the validation-checking step is performed with reference to a DTD or an XML Schema (paragraph block 0236).

Second, the Office contends that the validation checking meets the claimed parsing and comparing because Brook goes on to teach that in order to perform the

validation step, DTD or XML Schema tags are first hashed in a hashing step, in order to bring the <u>DTD/XML Schema</u> memory representation into <u>conformity</u> with the hashed nature of the <u>mark-up document</u> which has been generated by the hash step. The validation checking step <u>compares</u> the <u>mark-up document</u> structural representation generated in the step to the structural representation of the <u>DTD/XML Schema</u> generated in the step, to verify correct syntactic placement of syntactic elements in the markup document; noting that the string comparisons required for this comparison are now replaced by faster and more efficient numerical comparisons, as a result of the hashing operations (paragraph block 0237). It should be noted that the Office has

Applicant argues that Brook does not teach parsing two documents in tandem because Brook is directed towards establishing the validity of the form of the markup language document not towards comparing two documents against each other for validation (p. 17, last paragraph).

interpreted the hashing of Brook to meet the claimed parsing.

The Office disagrees.

By Applicant's own admission, Brook is directed to validating a markup language document against a validation reference document (VRD) to make sure the syntax and structure is proper (p 17, last paragraph). Further, Brook teaches that comparing syntactic attributes and hashed representations of said each document structural element in the structural representation of the document to corresponding syntactic

attributes and hashed representations in said structural representation of said <u>VRD</u> to thereby establish validity of the markup language document (paragraph block 0069).

Applicant argues other claims on the same basis as that of claim 1 and thus these arguments have all been addressed in the above responses to the arguments.

#### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Hillery whose telephone number is (571) 272-4091. The examiner can normally be reached on M - F, 10:30 a.m. - 7:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather R. Herndon can be reached on (571) 272-4136. The fax phone

Application/Control Number: 10/824,064 Page 34

Art Unit: 2176

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NH

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